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IN THE
Supreme Court of the United States
OCTOBER TERM, 1996

GENERAL ELECTRIC COMPANY, *et al.*,
Petitioners,
v.

ROBERT K. JOINER, *et al.*,
Respondents.

On Writ of Certiorari to the
United States Court of Appeals
for the Eleventh Circuit

BRIEF OF THE CHAMBER OF COMMERCE OF THE
UNITED STATES OF AMERICA AS AMICUS CURIAE
IN SUPPORT OF PETITIONERS

Of Counsel:

STEPHEN A. BOKAT
ROBIN S. CONRAD
NATIONAL CHAMBER
LITIGATION CENTER, INC.
1615 H Street, N.W.
Washington, D.C. 20062
(202) 463-5337

THOMAS S. MARTIN *
ROLAND G. SCHROEDER
SHEARMAN & STERLING
801 Pennsylvania Avenue, N.W.
Suite 900
Washington, D.C. 20004
(202) 508-8000
Attorneys for Amicus Curiae

* Counsel of Record

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QUESTION PRESENTED

What is the standard of appellate review for trial court decisions excluding expert testimony under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993)?

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INTEREST OF THE AMICUS CURIAE

Pursuant to Rule 37 of the Rules of this Court, the amicus curiae, Chamber of Commerce of the United States of America (the "Chamber"), submits this brief in support of the petitioners.¹ The Chamber, a nonprofit corporation organized and existing under the laws of the District of Columbia, is the world's largest business federation. It represents the interests of more than three million businesses and organizations of every size, sector and region.

¹ Letters from all parties consenting to the filing of this brief have been filed with the Clerk of this Court. Counsel for a party did not author this brief in whole or in part. No person or entity, other than the amicus curiae, its members, or its counsel made a monetary contribution to the preparation or submission of this brief.

Ninety-six percent of the Chamber's members are businesses with less than 100 employees.

The Chamber is filing this brief amicus curiae in support of petitioners because it believes that the "particularly stringent" standard of appellate review adopted by the Eleventh Circuit substantially dilutes and undermines the "gatekeeping" role of the district courts as set forth in *Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579 (1993). By substituting the judgment of the appellate court for that of the district court, by seeking to unduly narrow and soften the scope of the trial court's inquiry, and by advocating an unbalanced and result-oriented approach, the decision of the Eleventh Circuit represents a significant setback to the advances made by the judiciary in dealing with scientific issues.

Because American businesses would be critically affected by a weakening of *Daubert* and because the Chamber's members have had significant experience with the application of *Daubert*, the Chamber's views may be of substantial assistance to the Court's consideration of this case.

SUMMARY OF ARGUMENT

Four years ago, in *Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579 (1993), this Court firmly lodged with the trial court the responsibility for screening proffered scientific testimony in order to ensure its relevance and reliability. While some skeptics doubted the ability of trial judges to make such determinations, in the four years since *Daubert*, district court judges have proven the pundits wrong, undertaking their responsibilities with care and deliberation, holding Rule 104(a) hearings and conducting other detailed factual inquiries where appropriate, and by and large achieving consistent, responsible and proper results. The Courts of Appeals, for their part, have further strengthened the process by deferring to the decisions of trial judges who are "closer to the action," but only where they have adhered to the *Daubert* framework and made

appropriate inquiries into the basis, reasoning and methodologies on which purported scientific testimony is founded. In this fashion, the courts generally have applied the *Daubert* screening process in a manner that is both fair and efficient for litigants and for the judicial system as a whole.

The approach adopted by the Eleventh Circuit in this case, however, now threatens to undermine these precepts and undercut the "gatekeeping" responsibility of the trial court. More specifically, the Eleventh Circuit, by applying a "particularly stringent" standard of review, wrongly overturned a district court decision to exclude expert testimony and chastised the district court for undertaking precisely the type of careful and diligent review that *Daubert* requires.

The Eleventh Circuit's employment of a "particularly stringent" standard of review was improper and should be reversed because it fails to give due deference to the discretion and judgment of the trial judge, the judicial actor best positioned to make the fact-bound determinations and balance the competing interests mandated by Federal Rules of Evidence 401, 403, 702 and 703. Requiring appellate courts to conduct detailed factual inquiries under the guise of a "hard look" is not only an unreasonable and inefficient allocation of judicial resources, but violates every traditional principle of appellate review. Moreover, by creating a standard of review that scrutinizes decisions to exclude testimony more rigorously than decisions to admit testimony, the Eleventh Circuit skews the evenhanded approach required by the Federal Rules, and ignores the significant costs associated with requiring litigants to face claims or defenses based on nothing more than speculative "scientific" testimony. For all of these reasons, the proper standard of review should remain abuse of discretion, and this standard should be applied in an evenhanded, objective manner, giving equal deference to decisions to exclude and decisions to admit.

The Chamber's purpose in submitting this amicus brief, however, is not so much to focus on the legal principles that overwhelmingly mandate a reversal of the Eleventh Circuit's decision, but rather to bring to bear the practical experience of the many federal courts that have decided cases under *Daubert*. This experience amply illustrates the ability of trial judges to deal with the many faces of scientific testimony, the necessity for appellate courts to defer to the greater fact-finding abilities of the trial courts, and the absence of any compelling rationale for appellate courts to engage in the type of cold record review called for by the Eleventh Circuit.

ARGUMENT

I. ABUSE OF DISCRETION IS THE PROPER STANDARD OF REVIEW BECAUSE TRIAL JUDGES ARE IN A "BETTER POSITION" TO RESOLVE THE FACT-INTENSIVE ISSUES GOVERNING ADMISSIBILITY UNDER *DAUBERT*

It has long been established that decisions concerning the admissibility of evidence—including the admissibility of expert testimony—are confided to the sound discretion of the trial court, and that such decisions are not to be upset absent an abuse of that discretion. Indeed, that has been the law for more than a century. See, e.g., *Congress & Empire Spring Co. v. Edgar*, 99 U.S. 645, 658 (1878); *Old Chief v. United States*, 117 S. Ct. 644, 647 n.1 (1997). The fundamental policies underlying this long-standing precedent remain just as compelling today, particularly in light of the multiplicity of factual inquiries mandated by *Daubert* and the balancing of interests required by the Federal Rules of Evidence.

A. It Is Clear From the Very Nature of the *Daubert* Process That the Trial Court Is the Judicial Actor Best Positioned to Resolve the Various Admissibility Issues

It is well recognized that standards of review depend in large measure on "a determination that, as a matter

of the sound administration of justice, one judicial actor is better positioned than another to decide the issue in question." *Pierce v. Underwood*, 487 U.S. 552, 559-60 (1988). Issues which are strictly legal in nature are to be decided by appellate courts upon *de novo* review because they "are structurally suited to . . . devote their primary attention to legal issues," whereas issues which are primarily factual in nature are best decided by the trial court in "deference to the unchallenged superiority of the district court's factfinding ability." *Salve Regina College v. Russell*, 499 U.S. 225, 232-33 (1991).

Similarly, in cases presenting "mixed questions of law and fact," this Court has generally recognized the institutional advantages of the trial court and favored an abuse of discretion standard where the issues are primarily factual in nature. See *Miller v. Fenton*, 474 U.S. 104, 114 (1985). In the context of Rule 11 sanctions, for example, where trial courts are called upon to make determinations regarding both the factual and legal bases for the pleading, and ultimately to balance competing considerations in order to evaluate the sufficiency of a party's position, this Court rejected the contention that the legal aspects of the district courts' rulings should somehow be separated out for *de novo* review. Instead, the Court held that appellate courts should apply "a unitary abuse-of-discretion standard" to all aspects of the proceeding:

Rather than mandating an inquiry into purely legal questions . . . the Rule requires a court to consider issues rooted in factual determinations. . . . Familiar with the issues and litigants, the district court is better situated than the court of appeals to marshal the pertinent facts and apply the fact-dependent legal standard mandated by Rule 11.

Cooter & Gell v. Hartmarx Corp., 496 U.S. 384, 401-02 (1990); see also *Koon v. United States*, 116 S. Ct. 2035, 2046-47 (1996) (adopting a unitary abuse of discretion

standard for trial courts' departures from the Federal Sentencing Guidelines because "the district court must make a refined assessment of the many facts bearing on the outcome, informed by its vantage point and day-to-day experience in criminal sentencing").

The need for trial court discretion is especially compelling where courts must apply a general legal framework to multiple factual contexts. As the Court stated in adopting an abuse of discretion standard in the context of attorneys fee awards:

One of the "good" reasons for conferring discretion on the trial judge is the sheer impracticability of formulating a rule of decision for the matter in issue. Many questions that arise in litigation are not amenable to regulation by rule because they involve multifarious, fleeting, special, narrow facts that utterly resist generalization

Pierce, 487 U.S. at 559-62 (internal quotations omitted).

One need look no further than the *Daubert* opinion itself to realize that questions concerning the admissibility of scientific testimony present precisely the same type of "multifarious" issues "rooted in factual determinations" that require deference to the trial court. In particular, *Daubert* requires trial judges to make a variety of determinations, including: (1) whether the reasoning and methodology employed by the expert "fit" the particular facts of the case at bar; (2) whether such reasoning and methodology is reliable or "scientifically valid;" (3) whether the facts and data upon which the opinion is based are "of a type reasonably relied upon by experts in the particular field" as required by Rule 703; and (4) whether the probative value of the proffered testimony "is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury" as provided in Rule 403. 509 U.S. at 589-95. At the same time, however, this is a flexible framework that must be molded to the particular circumstances of each case, and in the

end trial courts must exercise their best judgment in determining what factors should be considered in balancing the requirements of the various Rules. Individually and collectively, these are fact-driven trial court functions, requiring intimate familiarity with the case at hand, the reasoning and methodology employed by the experts in that particular case, and the methodologies and techniques generally employed by those in the relevant scientific field.

B. The Practical Experience of Trial Courts Applying *Daubert* Reinforces the Fact-Intensive and Varied Nature of the Inquiry

The experience of the federal courts in the many cases decided since *Daubert* amply demonstrates the overwhelmingly factual nature of the inquiry. District courts routinely review voluminous documentary evidence, including expert reports, affidavits and depositions, scientific literature, studies and other relevant material, and often hold "*Daubert* hearings" to consider live testimony where needed.²

1. The First Inquiry: Relevance or "Fit"

Relevance or "fit" is almost purely a factual determination, the type of determination which traditionally is

² The evidentiary issues are particularly pronounced in the context of mass tort and class action cases. See, e.g., *In re TMI Litig. Cases Consol. II*, 911 F. Supp. 775, 785-86 (M.D. Pa. 1996) and *In re TMI Litig. Cases Consol. II*, 922 F. Supp. 997, 1000 (M.D. Pa. 1996) (multiple *Daubert* hearings conducted over the course of twenty days, with testimony, reports and affidavits from more than two dozen experts, as well as voluminous scientific literature and other documentary evidence); *In re Breast Implant Cases*, 942 F. Supp. 958, 959 (E.D.N.Y. & S.D.N.Y. 1996) ("extensive" *Daubert* hearing held at which court "heard many witnesses" and received into evidence more than 500 "documents and scientific papers"); *Hall v. Baxter Healthcare Corp.*, 947 F. Supp. 1387, 1393 (D. Or. 1996) (breast implant case in which court held hearing "which spanned four intense days" and received into evidence voluminous scientific literature and other documentary evidence).

accorded great deference by appellate courts. *United States v. Abel*, 469 U.S. 45, 54 (1984); see also *Weinstein's Federal Evidence* § 401.02[1] (2d ed. Supp. 1997) ("the determination of whether an item of evidence is relevant is . . . a factual issue; relevance does not address issues of law"). Particularly in the context of scientific testimony, "[f]it is not always obvious, and scientific validity for one purpose is not necessarily scientific validity for other, unrelated purposes." *Daubert*, 509 U.S. at 591. In practice, therefore, trial courts must look beyond the relevance of an expert's bald conclusions, and instead conduct sufficient factual inquiries to ensure that the expert's underlying "reasoning [and] methodology properly can be applied to the facts in issue." *Id.* at 593.

In *Cavallo v. Star Enterprise*, 892 F. Supp. 756, 759 (E.D. Va. 1995), *aff'd in relevant part*, 100 F.3d 1150 (4th Cir. 1996), for instance, a case involving alleged respiratory injuries from exposure to a spill of aviation fuel, the district court carefully reviewed not only the experts' reports, affidavits and deposition transcripts, but also evidence concerning the nature of the plaintiff's alleged injuries and each of the four studies upon which plaintiff's experts relied. Based on this extensive review of the evidence, the court concluded that "there [was] a lack of 'fit' between the studies relied upon and the conclusion reached" by the experts because the studies involved different chemicals, at different levels of exposure and for substantially longer periods of time than in the case at bar, and because in each study "[n]one of the exposed individuals suffered lasting effects" like the injuries plaintiff claimed. *Id.* at 765-70.

A detailed examination and comparison of the facts of the case and the underlying foundation for the expert's opinions also resulted in a finding of a lack of fit in *Bennett v. PRC Public Sector, Inc.*, 931 F. Supp. 484 (S.D. Tex. 1996). In that case plaintiffs claimed to have developed carpal tunnel syndrome from working

on a computer-aided dispatch system manufactured by defendant. Following a six-hour evidentiary hearing and its consideration of expert affidavits and extensive scientific literature, the trial court entered a series of findings identifying numerous factual omissions in the investigation and analysis conducted by plaintiffs' ergonomics expert, and ultimately concluded that his testimony was "based on such limited information about each of the Plaintiffs individually that there is no 'fit' between Plaintiffs and Dr. Schultze's general theory." *Id.* at 500.³

2. *The Second Inquiry: Reliability*

In *Daubert*, the Court set out a nonexclusive list of factors that district courts should consider in assessing reliability, including: (1) whether the expert's theories and methodologies have been, or can be, empirically tested; (2) whether they have been subjected to peer review and publication; (3) their general acceptance in the relevant scientific community; and (4) the potential rate of error. 509 U.S. at 593-94. Each of these factors requires a factual determination based on the relevant evidence, a truism that has been born out by experience.

In *Government of the Virgin Islands v. Penn*, 838 F. Supp. 1054 (D.V.I. 1993), for instance, a criminal case involving the admissibility of DNA test results, the district court, after holding two evidentiary hearings, lis-

³ See also, e.g., *Zaim v. Secretary of the Dep't of Health and Human Servs.*, No. 90-1031V, 1993 WL 346392, at *10-15 (Ct. Cl. Aug. 27, 1993) (holding evidentiary hearing with testimony by experts and treating physicians, reviewing scientific literature and medical records, and determining that expert's conclusion that DPT vaccine caused infant's death was founded on a single study of mice involving substantially higher doses "injected numerous times . . . in places unsuitable for humans, such as directly into the brain"); *Chikovsky v. Ortho Pharm. Corp.*, 832 F. Supp. 341, 343-46 (S.D. Fla. 1993) (reviewing expert affidavits and depositions, and determining that testimony regarding alleged carcinogenic effect of topical acne medication was founded solely on studies involving different medications "taken orally and in much higher doses").

tening to competing witness testimony, reviewing several hundred pages of expert affidavits and considering substantial amounts of scientific literature, methodically considered each of the four *Daubert* factors and entered extensive, corresponding findings of fact. In particular, with respect to the potential rate of error in DNA testing, the court devoted over fifteen pages of its decision to its findings regarding the principles underlying DNA profiling, the procedures followed by the FBI in conducting the DNA tests in that case, and "the means by which the FBI prevents both potential sources of human error in the execution of the process and potential error caused by imperfections inherent in the process." *Id.* at 1057-73.⁴

In *Bradley v. Brown*, 852 F. Supp. 690 (N.D. Ind.), *aff'd*, 42 F.3d 434 (7th Cir. 1994), a case involving allegations that plaintiffs had suffered MCS (multiple chemical sensitivity) as a result of a single exposure to a commercial pesticide, the trial court analyzed the deposition testimony of plaintiffs' two experts and "literally hundreds of pages of material discussing MCS" in order to determine "whether the proffered testimony . . . can be and has been empirically tested." *Id.* at 698-700. Based on its review of the evidence, the trial court found that the experts' testimony had not been tested, but rather was founded on nothing more than "uncontrolled" and unreliable "anecdotal" observations, and that even the scientific literature revealed a consensus that "[p]roper epidemiological research on the characteristics of MCS" was needed. *Id.*⁵

⁴ See also, e.g., *Hein v. Merck & Co.*, 868 F. Supp. 230, 231-34 (M.D. Tenn. 1994) (reviewing expert testimony and scientific literature and assessing the potential for error in hedonic damage expert's methodology); *In re TMI Litig.*, 922 F. Supp. at 1015-19 (reviewing expert testimony and scientific literature and assessing the potential for error in a cancer study conducted for litigation purposes).

⁵ See also, e.g., *Schmaltz v. Norfolk & W. Ry.*, 878 F. Supp. 1119, 1121-23 (N.D. Ill. 1995) (reviewing expert affidavits, deposi-

Similarly, in *De-Greaux v. Whitehall Laboratories, Inc.*, 874 F. Supp. 1441, 1448 (D.V.I.), *aff'd*, 46 F.3d 1120 (3d Cir. 1994), a case in which plaintiff claimed to have suffered birth defects as a result of her mother's use of Primatene Mist, the "court conducted a hearing spanning seven separate days," heard testimony from nine expert witnesses, reviewed substantial scientific literature, and entered extensive findings of fact: identifying the relevant scientific field as teratology, describing the methodologies generally employed by teratologists, determining the methodologies used by plaintiff's medical experts in that case, and finally comparing those methodologies to those generally employed by teratologists. *Id.* at 1448-73, 1478. Based on this extensive review of the evidence, the court found numerous, significant departures from accepted methodologies: "Each of plaintiff's expert witnesses is able to draw his or her respective conclusions only by ignoring the basic requirements of the relevant scientific community's methodology." *Id.* at 1478.⁶

tion testimony and scientific literature, and determining that the medical experts have "neither performed nor identified any studies . . . in the scientific or medical literature that links [the herbicide] atrazine . . . to [the alleged respiratory syndrome] RADS"); *Sorensen v. Shaklee Corp.*, Civ. 1-91-CV-70007, 1993 WL 735819, at *2, 6 (S.D. Iowa Sept. 28, 1993) (reviewing expert affidavits, deposition testimony and scientific literature, and determining that medical experts' theory regarding alleged teratological effect of chemically-treated alfalfa tablets "has not been tested, has not been subjected to peer review or publication, and no evidence of its general acceptance has been offered"), *aff'd*, 31 F.3d 638 (8th Cir. 1994).

⁶ See also, e.g., *Diaz v. Johnson Matthey, Inc.*, 893 F. Supp. 358, 361, 365-77 (D.N.J. 1995) (holding a two and one-half day hearing, reviewing expert reports, deposition transcripts and scientific literature regarding workplace exposure to platinum salts, and entering extensive findings of fact identifying numerous departures from accepted methodologies); *Baxter Healthcare*, 947 F. Supp. at 1402-14 (holding a four-day hearing, reviewing voluminous documentary evidence, and conducting a separate and detailed *Daubert* analysis for each of seven experts on alleged injurious effects of breast im-

Heeding this Court's caution that the *Daubert* analysis is to be a "flexible one" and that "[m]any factors will bear on the inquiry," district courts have also considered a number of other factors, such as: (a) whether the expert opinion was developed solely for litigation, see *Diaz*, 893 F. Supp. at 377 (excluding testimony where expert had never "utilized his diagnostic method other than for purposes of litigation");⁷ (b) whether the expert's choice of methodologies was driven by preconceived conclusions, see *Sorensen*, 31 F.3d at 649 (excluding testimony where "[i]nstead of reasoning from known facts to reach a conclusion, the experts here reasoned from an end result in order to hypothesize what needed to be known but what was not");⁸ and (c) whether the experts attempted to rule out other potential causes, see *Bennett*, 931 F. Supp. at 492, 499 (excluding testimony where expert "made no meaningful attempt to exclude

plants); *Cavallo*, 892 F. Supp. at 764-71 (reviewing evidence and entering extensive findings identifying and comparing methodologies employed by experts with those generally employed in the field of toxicology, and determining that "while the agreed-upon methodology appears to be scientifically valid, it does not appear to have been faithfully applied" in this particular case).

⁷ See also, e.g., *Casey v. Ohio Med. Prods.*, 877 F. Supp. 1380, 1384 (N.D. Cal. 1995) (excluding medical testimony where "opinion was developed for the express purpose of testifying"); *Wade-Greoux*, 874 F. Supp. at 1479 (excluding testimony where expert employed a different methodology in litigation than she did "when addressing her scientific peers"); *Haim*, 1993 WL 346392, at *6, 11 (excluding testimony where expert utilized different practices in litigation than he did in his scientific practice); but see *In re TMI Litig. Cases Consol. II*, 910 F. Supp. 200, 203 (M.D. Pa. 1996) ("That Dr. Kozubov thought that he was performing the study solely for scientific purposes speaks highly of the integrity of the study.").

⁸ See also, e.g., *Cavallo*, 892 F. Supp. at 764 n.12 ("It is fairly clear from a review of the record that in many instances, Dr. Monroe did not follow the methodology to form his opinion, but rather formed his opinion and then tried to conform it to the methodology.").

other potential causes of the Plaintiffs' injuries," including "multiple, well-recognized, non-work-related potential causes for [carpal tunnel syndrome]").⁹ Each of these additional factors, like the four factors set forth in *Daubert*, is highly factual in nature, focusing specifically on the individual circumstances of the plaintiff and the particular process used by the expert in that case.

3. *The Third Inquiry: Rule 703*

In addition to the relevance and reliability requirements of Rule 702, trial judges must be mindful of the requirements of Rule 703. *Daubert*, 509 U.S. at 595. "In determining whether the expert has based his or her opinion on data of a type reasonably relied on by experts in the field, the courts must evaluate the opinion and its foundation on a case-by-case basis." *Weinstein's Federal Evidence*, *supra*, § 703.05[2][a].

In *Haim*, for instance, a case involving an infant death allegedly resulting from inoculation by the DPT vaccine, the court determined that the opinion of plaintiff's expert, a pediatric neurologist, was based primarily on a single British study. However, upon careful examination of the study itself, as well as related scientific literature and expert testimony, the trial court found that the study was wholly untrustworthy and not one upon which reasonable scientists would rely to determine causation because the results were statistically insignificant and because the authors of the study themselves "criticized their own design of the study," "recognized that [it] may be biased in the

⁹ See also, e.g., *Chikovsky*, 832 F. Supp. at 345 (reviewing extensive evidence and determining that expert had failed to conduct any "genetic studies to determine whether there are genetic explanations for Honey's birth defects"); *Diaz*, 893 F. Supp. at 366, 376 (excluding testimony where plaintiff failed to rule out numerous other potential causes of asthma, including a family history of asthma, a history of smoking and possible exposure to industrial allergens at prior jobs).

selective reporting of children," and conceded "that the [study] has not been replicated by other case-control studies." 1993 WL 346392, at *5-6, *12-13.¹⁰

4. *The Final Inquiry: Balancing*

In addition to the extensive fact-finding function discussed above, trial courts also must engage in the type of balancing to which appellate courts ordinarily defer. For example, not every case will involve each of the many factors discussed above. One of the more difficult threshold judgments trial courts routinely make is which factors to consider, and of course it is not uncommon for some factors to weigh in favor of exclusion and others to weigh in favor of admissibility. In those cases, judges carefully assess the competing considerations and, based on their experience and judgment, reach a decision not only as to the relevance and reliability of the proffered testimony, but ultimately as to whether it will be helpful to the jury. *See, e.g., In re TMI Litig.*, 911 F. Supp. at 788-826 and 922 F. Supp. at 1019-36 (balancing competing factors for numerous experts). Similarly, it may be that only certain aspects of the challenged testimony are unreliable, in which case district courts again must exercise their judgment in determining which portions of the testi-

¹⁰ *See also, e.g., De Jager Constr., Inc. v. Schleining*, 938 F. Supp. 446, 450-55 (W.D. Mich. 1996) (holding *Daubert* hearing, and concluding that opinion was not founded on "the type of facts upon which a certified public accountant would rely" and "deliberately ignor[ed] documents and figures which would strike a certified public accountant in the face"); *Casey*, 877 F. Supp. at 1383-86 (reviewing expert affidavits and underlying study, and concluding that opinion was based solely on "case reports [which] are not reliable scientific evidence of causation"); *Henry v. Hess Oil V.I. Corp.*, 163 F.R.D. 237, 247 (D.V.I. 1995) (reviewing expert's trial testimony and other evidence concerning expert's methodology, and concluding that vocational psychologist's testimony "was unreliable and lacked an adequate factual foundation under [Rule 703]").

mony, if any, to admit and which portions to exclude. *See, e.g., Guillory v. Domtar Indus. Inc.*, 95 F.3d 1320, 1330-31 (5th Cir. 1996).¹¹

Finally, because "[e]xpert evidence can be both powerful and quite misleading," *Daubert*, 509 U.S. at 595, trial judges routinely balance the competing considerations articulated in Rule 403, particularly where it appears that an expert's testimony is of questionable or marginal relevance or reliability. *See, e.g., De Jager Constr.*, 938 F. Supp. at 453 (concluding that expert's opinion, "has little, if any, probative value" and "would confuse the jury and prejudice [the opposing party]").¹²

Each of these assessments requires an intimate familiarity with the case, and consequently:

When a balance of this sort has to be struck, it should, except in rare instances, be left to the discretion of the trial judge, subject to review for abuse. It is he who is in the best position to weigh the relevant factors, such as the value of the disputed evidence as compared with other proof adducible to the same end and the effectiveness of limiting instructions.

Eichel v. New York Central R.R., 375 U.S. 253, 256 (1963) (Harlan, J., concurring in part) (citation omitted); *see also Abel*, 469 U.S. at 54 (district court is accorded "wide discretion" under Rule 403).

¹¹ *See also, e.g., Gier v. Educational Serv. Unit No. 16*, 845 F. Supp. 1342, 1358 (D. Neb. 1994), *aff'd*, 66 F.3d 940 (8th Cir. 1995); *Liu v. Korean Air Lines Co.*, No. 84 Civ. 0690 (PNL), 1993 WL 478343, at *1 (S.D.N.Y. Nov. 16, 1995).

¹² *See also, e.g., Wade-Greaux*, 874 F. Supp. at 1484-85 (weighing testimony and concluding that because experts ignored the question of "human therapeutic dosages . . . opinions from those witnesses that therapeutic dosages of [the drug] are teratogenic would confuse, mislead and overwhelm the jury"); *Bennett*, 931 F. Supp. at 502-03 (where "the probative value of Dr. Schulze's conclusions . . . is eviscerated because the conclusions are untested and based on unreliable information, the probative value of the evidence is heavily outweighed by its prejudicial effect").

C. The Courts of Appeals Are Not Positioned to Second-Guess the District Court's Exercise of Its Gatekeeper Function

All of this experience under *Daubert* demonstrates that applying Rules 401, 403, 702 and 703 requires the type of multifaceted factual determinations that appellate courts are unequipped to make.¹³ It is beyond peradventure that the proper institutional forum for resolving such competing "multifarious" considerations is the district court, *Pierce*, 487 U.S. at 562, because "the district court is better situated than the courts of appeals to marshal the pertinent facts and apply the fact-dependent legal standard[s]," *Cooter*, 496 U.S. at 402. Indeed, "[t]he trial judge's major role is the determination of fact, and with experience in fulfilling that role comes expertise." *Anderson v. City of Bessemer*, 470 U.S. 564, 574 (1985). Trial courts also have vastly more experience dealing with questions of expert testimony. Compare *Koon*, 116 S. Ct. at 2039 ("District courts have an institutional advantage over appellate courts . . . given that they see so many more Guideline cases").¹⁴ By contrast, appellate courts

¹³ According to the Third Circuit, "evaluating the reliability of scientific methodologies and data does not generally involve assessing the truthfulness of the expert witnesses and thus is often not significantly more difficult on a cold record." *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 749 (3d Cir. 1994). However, this very rationale has been expressly rejected both by the authors of the Federal Rules and by the Supreme Court. See FED. R. CIV. P. 52 advisory committee's note (rejecting this precise argument, stating: "To permit courts of appeals to share more actively in the factfinding function would tend to undermine the legitimacy of the district courts in the eyes of litigants, multiply appeals by encouraging appellate retrial of some factual issues, and needlessly reallocate judicial authority."); *Anderson*, 470 U.S. at 574 ("The rationale for deference . . . is not limited to the superiority of the trial judge's position to make determinations of credibility.").

¹⁴ Even courts that lay claim to an appellate gatekeeper role are forced to acknowledge the trial court's "superior vantage point" for the resolution of evidentiary matters and that the trial court's

lack the opportunity, tools, context and experience to engage in the detailed examination that *Daubert* mandates. Not surprisingly, therefore, *Daubert* leaves no doubt that responsibility for this function is lodged squarely in the trial court. See *Daubert*, 509 U.S. at 589 ("under the Rules the trial judge must ensure" relevance and reliability) (emphasis added); *id.* at 591 ("the trial judge must determine . . . whether the expert is proposing to testify to . . . scientific knowledge that . . . will assist the trier of fact") (emphasis added). The assertion that the appellate courts can assume something like a *de novo* role with respect to the gatekeeper exercise is thus inconsistent with the functional learning derived from the experience of trial courts under the Rules, with the role appellate courts generally play with respect to both fact and evidentiary issues, and with *Daubert's* clear allocation of gatekeeper responsibility to the trial judge.

Even if the appellate courts were equally positioned to play the gatekeeper role, however, no benefits have been identified to offset the waste of judicial resources that would be involved in allocating scarce appellate resources to a second review of factual determinations. As this Court said in *Pierce*, "even where the district judge's full knowledge of the factual setting can be acquired by the appellate court, that acquisition will often come at unusual expense, requiring the court to undertake the unaccustomed task of reviewing the entire record." 487 U.S. at 560; see also *Anderson*, 470 U.S. at 574 ("Duplication of the trial judge's efforts in the court of appeals would very likely contribute only negligibly to the accuracy of fact determination at a huge cost in diversion of judicial resources.").

The waste of private resources resulting from repetitive considerations of gatekeeper issues also calls into ques-

superior position means that its "evidentiary rulings are generally subject to a particularly high level of deference." *Paoli*, 35 F.3d at 749.

tion the wisdom of a stringent factual review in the court of appeals. Particularly in the context of toxic tort and other complex litigation, a rule that requires parties to prove their case twice in order to exclude unsupported scientific evidence would impose significant and unwarranted costs and burdens on the American business community. One need look no further than the *Paoli* case for such an example. In that case, questions regarding the admissibility of plaintiffs' expert testimony went up to the court of appeals three times over a period of seven years for a "hard look" review, and a total of eleven years elapsed before the case was finally resolved in defendants' favor by a jury.¹⁵ Where "the parties . . . have already been forced to concentrate their energies and resources on persuading the trial judge that their account of the facts is the correct one . . . requiring them to persuade three more judges at the appellate level is requiring too much." *Anderson*, 470 U.S. at 575.

For all of these principled and practical reasons, the admissibility of expert testimony historically has been deemed a factual matter to be reviewed only for abuse of discretion. See *Edgar*, 99 U.S. at 658. Deferential review was the norm even under the *Frye* standard where trial courts determined only whether the scientific testimony was based on generally accepted scientific principles. See, e.g., *United States v. Butt*, 955 F.2d 77, 85 (1st Cir. 1992). Under *Daubert*, the inquiry is dramatically more varied and fact-intensive. See *In re Joint E. & S. Dist. Asbestos Litig.*, 52 F.3d 1124, 1132 (2d Cir. 1995) ("The *Daubert* Court significantly changed the standards governing the admissibility of scientific evidence by expanding district courts' discretion to evaluate the reliability and relevance of contested evidence."). Thus, the very nature of *Daubert*

¹⁵ See *In re Paoli R.R. Yard PCB Litig.*, 916 F.2d 829 (3d Cir. 1990); *Paoli*, 35 F.3d 717 (3d Cir. 1994); and *In re Paoli R.R. Yard PCB Litig.*, No. 95-2098, 1997 WL 239652 (3d Cir. May 12, 1997).

bert and the experience of the district courts in carrying out their gatekeeper function only enhances the claim of the trial court to a standard of deferential review that reflects the primacy of its institutional position with respect to the screening of expert witnesses pursuant to the Federal Rules of Evidence.

II. NEITHER THE RISKS OF TRIAL COURT EXCLUSIONARY ERROR, NOR THE PURPORTED PRESENCE OF A PRESUMPTION IN FAVOR OF ADMISSIBILITY, SUPPORT THE ADOPTION OF A STRINGENT STANDARD OF REVIEW APPLIED SOLELY TO THE EXCLUSION OF EXPERT TESTIMONY

Although the *Daubert* inquiries are by their nature committed to the trial court, the Eleventh and Third Circuits claim that the risk of trial court error in excluding expert evidence, when combined with a presumption in favor of its admissibility, require appellate courts to exercise strict scrutiny of decisions excluding, but not those admitting, expert testimony. Neither argument is compelling and ironically the resulting "hard look" threatens to dilute what has proven to be an effective mechanism to screen scientific evidence.

A. The Record of *Daubert* Decisionmaking Provides No Support for the Claim That Rule 702's Standards Are Either Amorphous or Present A Substantial Risk of District Court Error

Implicit in the few appellate decisions advocating a one-sided stringent review of district court decisions excluding proffered scientific evidence is a misplaced concern about the capacity of the district courts to administer the *Daubert* process fairly and to apply properly the predicate admissibility standards of Rules 702 and 703. See *Paoli*, 35 F.3d at 750 ("because the reliability standard of Rules 702 and 703 is somewhat amorphous, there is a significant risk that district judges will set the threshold

too high").¹⁶ This anxiety about the performance of trial judges is flatly inconsistent with the Supreme Court's own analysis. Indeed, when this Court allocated the *Daubert* review to the trial court, it expressly declared that it was "confident that federal [district] judges possess the capacity to undertake this review." 509 U.S. at 593; *see also Michelson v. United States*, 335 U.S. 469, 488 (1948) (Frankfurter, J., concurring) ("[i]f the United States District Courts are not manned by judges of such qualities, appellate review, no matter how stringent, can do very little to make up for the lack of them").

Similarly, the two circuit courts other than the Eleventh that have explicitly considered the *Paoli* risk analysis have both rejected it as inconsistent with both *Daubert* and their own confidence in the ability of the district court judges to successfully resolve these issues. *See Duffee v. Murray Ohio Mfg. Co.*, 91 F.3d 1410, 1411 (10th Cir. 1996); *Cavallo*, 100 F.3d at 1153-54. Notably, neither the Eleventh Circuit nor the Third identifies a record of district court decisionmaking that reflects a "significant risk" of preclusion of expert witnesses on grounds that are either amorphous or erroneous. In fact, the experience of district courts instead suggests that the review process mandated by *Daubert* has been successful in isolating failures in methodology and reasoning so as to permit evenhanded and straightforward admissibility determinations. As the cases discussed earlier amply demonstrate, the district court record reflects exclusions of evidence based not on fine points of metaphysics, but rather on wholesale failures to test theories or otherwise support them with appropriate studies, to subject them to peer review, to conform out-of-court methodologies with in-court hypotheses, to consider obvious alternative

¹⁶ Even if the reliability standards of Rules 702 and 703 were amorphous as the Third Circuit suggests, that would not justify a one-sided approach since there is an equal risk that amorphous standards will lead to erroneous decisions to admit as to erroneous decisions to exclude.

causes of the asserted injury, or to investigate facts fundamental to the experts' hypotheses.

Similarly, nothing in the appellate case experience supports the fears that the district courts will be undone by the flexible nature of the *Daubert* process or suggests the need for a heightened level of scrutiny. Mimicking the experience in the district courts, the great bulk of *Daubert* decisions on appeal appear to involve wholesale failures of evidentiary support rather than tortured attempts to comply with elusive requirements of admissibility. In these mainstream cases, abuse of discretion has proven to be more than adequate as an engine of review. Some examples are:

Guillory, 95 F.3d at 1331: Affirmed a partial exclusion of testimony by an accident reconstruction expert under an abuse of discretion standard where the expert's opinion "was not based upon the facts in the record but on altered facts and speculation designed to bolster Deere's position."

Rosado v. Deters, 5 F.3d 119, 124 (5th Cir. 1993): Affirmed the exclusion of testimony under an abuse of discretion standard where the expert "himself admitted that he could not independently establish the necessary physical and mathematical bases for his opinion."

United States v. Tellez, No. 94-10573, 1995 WL 745968, at *4 (9th Cir. Dec. 14, 1995): Affirmed the exclusion of testimony regarding the reliability of eyewitness identification under an abuse of discretion standard where the expert could "not identify any specific study or theory he relied upon to formulate his opinion."

Lust v. Merrell Dow Pharmaceuticals, Inc., 89 F.3d 594, 597 (9th Cir. 1996): Affirmed the exclusion of testimony attributing birth defects to a fertility drug under an abuse of discretion standard where the expert had not "explained how he went about reach-

ing his conclusions [nor] . . . pointed to an objective source demonstrating that his method and premises were generally accepted by . . . a recognized minority of teratologists."

Claar v. Burlington N. R.R., 29 F.3d 499, 502 (9th Cir. 1994): Affirmed exclusion of testimony attributing various ailments to chemical exposure under a manifestly erroneous standard where the experts utterly failed "to explain the reasoning and methods underlying their conclusions."

Porter v. Whitehall Lab., Inc., 9 F.3d 607, 614, 616 (7th Cir. 1993): Affirmed exclusion of testimony where experts "could not point to [any] studies, records or data" supporting their conclusions and "gave opinions unsupported by any method—generally accepted or otherwise."¹⁷

In the real world of litigation the courts of appeals only occasionally face the more complex problems of determining whether proffered science that has yet to gain acceptance is nevertheless reliable science with evidentiary value that requires it to be admitted under the Federal Rules. Even in such cases, however, the circuit courts have not engaged in second-guessing, but instead have emphasized the importance of the *Daubert* process, expressing confidence that adherence to that process will yield proper results.¹⁸ Moreover, a review of the appellate

¹⁷ See also *Deimer v. Cincinnati Sub-Zero Prods.*, 58 F.3d 341, 344 (7th Cir. 1995); *Sorensen*, 31 F.3d at 649-50; *Habecker v. Clark Equip. Co.*, 36 F.3d 278, 289-99 (3d Cir. 1994); *American & Foreign Ins. Co. v. General Elec. Co.*, 45 F.3d 135, 139 (6th Cir. 1995). Compare *United States v. Bynum*, 3 F.3d 769, 773 (4th Cir. 1993) (affirming admission of testimony where criteria plainly met), cert. denied, 510 U.S. 1132 (1994); *Benedi v. McNeil-P.P.C., Inc.*, 66 F.3d 1378, 1384 (4th Cir. 1995); *Hopkins v. Dow Corning Corp.*, 33 F.3d 1116, 1123 (9th Cir. 1994).

¹⁸ See, e.g., *Gier*, 66 F.3d at 944 (affirming decision because "[t]he analysis conducted by the District Court is precisely the type

decisions involving more complex claims still suggests that the *Daubert* process has been successful in isolating deficiencies of logic and methodology that ultimately provided the courts with rather clearcut bases for decision.

In *Bradley v. Brown*, 42 F.3d 434 (7th Cir. 1994), for instance, the court was faced with questions concerning the scientific etiology of MCS, a controversial, multi-symptom disorder of the 1990's that the district court concluded was at such an "early stage of scientific scrutiny," even the plaintiffs' experts admitted that their etiological models were "speculative" and that epidemiological study was needed. See *Bradley*, 852 F. Supp. at 699-700, discussed at page 13, *supra*. Stating that if "the district court adhered to *Daubert*'s parameters, we will not disturb [its] findings unless they are manifestly erroneous," the Seventh Circuit conducted a review of the district court's findings with respect to the patent deficiencies in the experts' methodologies. 42 F.3d at 436-37. Based on this review, the Seventh Circuit concluded that the trial court "more than adequately adhered to the *Daubert* framework [and] took its gatekeeping function conscientiously We will thus not replace the district court's careful decision with our own judgment." *Id.* at 438-39.

The Sixth Circuit in *United States v. Bonds*, 12 F.3d 540 (6th Cir. 1993) was equally focused on the quality of the district court's process in its affirmance of a decision to admit expert testimony relating to DNA analysis under an abuse of discretion standard. Examining the "exhaustive findings" of the magistrate judge and the "very thorough overview of the experts' testimony," *id.* at 556,

of analysis the decision in *Daubert* would appear to contemplate"); *Pedraza v. Jones*, 71 F.3d 194, 197 (5th Cir. 1995) (affirming decision to strike expert affidavit because the "affidavit satisfie[d] none of the indicia of reliability outlined in *Daubert*"); *Government of the Virgin Islands v. Sanes*, 57 F.3d 838, 841 (3d Cir. 1995) (affirming decision because the "district court properly held a *Daubert* hearing in which the nature of [the expert's] testimony was fully considered").

the appellate court reviewed the trial court's findings under each of the four factors and concluded that while the process of DNA testing is still evolving and results may not be wholly accurate, the "results of the DNA testing were clearly derived from tests based on methods and procedures of science and not based merely on speculation, and were supported by sound and cogent reasoning, even if these methods and procedures are not perfected." *Id.* at 565-66.

At the same time, however, the circuit courts have not hesitated to reverse district court decisions for abuse of discretion, particularly where they have strayed from the principled application of the *Daubert* analytical process. See, e.g., *United States v. Hall*, 93 F.3d 1337, 1342-45 (7th Cir. 1996) (reversing as a clear error of law the district court's decision to exclude psychiatric testimony on the defendant's propensity to give false confessions where the district court "fail[ed] to conduct a full *Daubert* inquiry;" "[t]he judge never mentioned *Daubert* specifically, and thus he never focused on the individual questions that must be answered."); *Tyus v. Urban Search Management*, 102 F.3d 256, 263 (7th Cir. 1996) (reversing as a clear error of law the district court's decision to exclude a sociologist's testimony regarding patterns of housing discrimination and a psychologist's testimony on racial targeting where "[i]n neither of its rulings on the experts did the court make use of the framework established by *Daubert*").¹⁹

¹⁹ Even under an abuse of discretion standard, of course, the courts of appeals can correct errors of law and also determinations of fact that are manifestly erroneous. *Wilton v. Seven Falls Co.*, 115 S. Ct. 2137, 2144 (1995). See, e.g., *United States v. Rouse*, 100 F.3d 560, 566-74 (8th Cir. 1996); *Holbrook v. Lykes Bros. S.S. Co.*, 80 F.3d 777, 781-82 (3d Cir. 1996); *United States v. 14.38 Acres of Land*, 80 F.3d 1074, 1077-79 (5th Cir. 1996); *United States v. Shay*, 57 F.3d 126, 132-34 (1st Cir. 1995); *Joy v. Bell Helicopter Textron, Inc.*, 999 F.2d 549, 567-70 (D.C. Cir. 1993); *United States v. Velasquez*, 64 F.3d 844, 848-52 (3d Cir. 1995); *Ambrosini v. Labarraque*, 101 F.3d 129, 135-41 (D.C. Cir. 1996).

There is nothing in the appellate experience that suggests any reason to doubt the capacity of the trial courts to sort through the requirements of reliability and fit embedded in Rule 702. To the contrary, the process established by *Daubert* has generally proven to be an effective checklist facilitating both district court analysis and traditional appellate review that properly focuses on the reasoning and methodology supporting proffered scientific testimony. The implicit attitude of the vast majority of the circuit courts is that explicitly stated by the Tenth Circuit: "Like the Supreme Court we 'are confident that federal judges possess the capacity to undertake this review.' . . . Their decisions, therefore, are properly reviewed under the traditional abuse of discretion standard." *Duffee*, 91 F.3d at 1411 (quoting *Daubert*, 509 U.S. at 593).

B. Stringent One-Way Review Cannot Be Justified by a Presumption of Admissibility of Undifferentiated Expert Testimony

The second basis articulated by the Eleventh and Third Circuits for exercising a stringent review of trial court decisions excluding expert testimony (but not those admitting expert testimony) is their view that "the Federal Rules of Evidence governing expert testimony display a preference for admissibility." *Joiner v. General Elec. Co.*, 78 F.3d 524, 529 (11th Cir. 1996), *cert. granted*, 117 S. Ct. 1243 (1997). This one-sided and result-oriented approach is flatly inconsistent with the Federal Rules of Evidence, prior decisions of this Court and fundamental notions of fairness.

First, skewed standards of review are not an appropriate mechanism for advancing the substantive goals of a court. Rather, "the reviewing attitude that a court of appeals takes toward a district court decision should depend upon 'the respective institutional advantages of trial and appellate courts,' not upon what standard of review will more likely produce a particularly substantive result."

First Options v. Kaplan, 115 S. Ct. 1920, 1926 (1995). Just as the Eleventh Circuit was mistaken in justifying a "specially lenient" standard of review of district court decisions confirming arbitration awards by reference to a federal policy favoring arbitration, *see id.*, so too is it now mistaken in applying a "particularly stringent" standard of review to decisions excluding expert testimony based upon a purported policy favoring scientific evidence.

Second, to the extent the Eleventh Circuit is equating the liberal thrust of the Rules with a preference for admissibility, it overlooks the fact that the liberal policies underlying the Rules have already been incorporated in the language governing admissibility. That language plainly does not reflect a preference or presumption in favor of irrelevant, unreliable or misleading scientific testimony. To the contrary, "the Rules of Evidence—especially Rule 702 . . . [require] that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand." *Daubert*, 509 U.S. at 597; *see also* FED. R. EVID. 402 (expressly stating that "[e]vidence which is not relevant is not admissible," and even relevant evidence is only admissible "except as otherwise provided . . . by these rules"). Indeed, no piece of evidence, and particularly not expert testimony, comes to the table with some predetermined presumption of admissibility. *Compare, e.g.*, FED. R. EVID. 401, advisory committee note ("[r]elevancy is not an inherent characteristic of any item of evidence"). Rather, all evidence begins with an assumption of non-admissibility, and it is the proponent of the evidence who bears the burden of establishing "by a preponderance of proof" that the admissibility standards of the Rules have been satisfied. *Daubert*, 509 U.S. at 593 n.10. In short, there is no preference for admissibility that somehow overrides the express requirements of the Rules, liberal as they may be.

Moreover, these Rules reflect a thoughtful balance on the part of their drafters between the benefits of expert testimony and the dangers inherent in the admission of

junk science masquerading in the costume of scientific expertise, a balance which this Court was careful to preserve in *Daubert* even while recognizing the liberal policies underlying the Rules. *See Daubert*, 509 U.S. at 595 (because "[e]xpert evidence can be both powerful and quite misleading," a trial judge "exercises more control over experts than over lay witnesses"). Thus, while the general acceptance standard of *Frye* was found incompatible with the "liberal thrust" embodied in the Rules, the *Daubert* Court did not replace that standard with an undifferentiated preference for the admission of scientific testimony, but rather with a process designed to test proffered evidence against the requisite standards of reliability and relevance. Contrary to the Eleventh Circuit, what *Daubert* added was not a bias in favor of admission but an unweighted procedure for testing evidence against fair and objective criteria.

The Eleventh Circuit now attempts to add a "preference" on top of the liberal standards already incorporated in the Rules and expressly taken into account by the Court in constructing the *Daubert* framework. Creating a new standard of appellate review based upon such a "preference" would triple-count the "liberal thrust" of the Rules, and stack the deck so heavily in favor of the admission of scientific evidence as to distort the balance struck by the Rules and undermine the requirements of relevance and reliability that alone exclude junk science.

In fact, the decision of the Eleventh Circuit in this case drives home the inevitable reality that if the process is to be driven at every turn by a bias in favor of the undifferentiated admission of expert testimony, it will invite a complimentary appellate review that discourages by form and substance an effective gatekeeper function. The core of *Daubert* is its requirement for an intensive analysis of both the methodology and the reasoning underlying the expert's opinion. Unaccountably, however, the Eleventh Circuit chastises the trial court for precisely this effort

and instead urges an undifferentiated approach that substitutes some generalized notion of cumulative impact for the strict requirement of scientific and logical process.²⁰ In a sentence that threatens to vitiate the empirical core of *Daubert*, the Eleventh Circuit instructs: "Opinions of any kind are derived from individual pieces of evidence, each of which by itself might not be conclusive, but when viewed in their entirety are the building blocks of a perfectly reliable conclusion, one reliable enough to be submitted to the jury." 78 F.3d at 532. This remarkable generalization by the Eleventh Circuit fails to appreciate, however, that in a proper *Daubert* analysis the critical question is whether the individual pieces of evidence *have been* linked together in a logical and reliable fashion. See *Daubert*, 509 U.S. at 591 (requiring "credible grounds supporting such a link" in scientific logic). The *Joiner* dissent focuses squarely on the fundamental conflict between this broad-brush approach, that is virtually inevitable in appellate *de novo* review of enormously complex fact-bound determinations, and the necessity for a detailed process that alone will separate real from apparent science: "The majority admonishes the trial court for not 'viewing the bases of the expert's opinion as a whole.' However sifting through the expert's testimony is a crucial 'gatekeeping' function [A]n expert may not bombard the court with innumerable studies and then, with blue smoke and sleight of hand, leap to the conclusion." 78 F.3d at 537.²¹

²⁰ While it discouraged the district court from its detailed analysis, the Eleventh Circuit conducted its own independent review of the record, picking up facts that had not even been briefed by the plaintiff, and then substituted its own judgment about the relevance and reliability of the expert testimony. Compare *Anderson*, 470 U.S. at 576 ("In detecting clear error in the District Court's finding . . . the Fourth Circuit improperly conducted what amounted to a *de novo* weighing of the evidence in the record.").

²¹ It would be naive to believe that the imposition of strict scrutiny for the preclusion of experts would not have an adverse impact on

Finally, a stringent standard of review driven by a preference for admissibility undercuts the evenhanded administration of the law, and ignores the enormous risks and costs associated with requiring litigants to face claims and defenses based on nothing more than speculative scientific testimony. While the Eleventh and Third Circuits would strictly scrutinize exclusionary decisions that result in summary judgment, they would not carefully scrutinize decisions to admit scientific testimony no matter how devastating the repercussions may be for individual reputation, commercial interests, or in some instances the loss of liberty itself.²² All evidentiary decisions involving expert testimony may bear on the ultimate viability of the claims at issue and are significant to one party or the other, and trial judges treat them as such. The significance of these decisions only emphasizes the propriety of a standard of review that respects the indisputably superior position of the trial court to make those determinations. Compare *Salem v. United States Lines Co.*, 370 U.S. 31, 35-37 (1962) (reversing court of appeals for failure to give deference to district court decision to *exclude* expert testimony). Neither case law nor policy support a process of appellate review that weakens rather than strengthens the gatekeeper's commitment to the detailed evenhanded procedures which alone will fairly separate scientific wheat from pseudo scientific chaff.

the intensity with which district courts perform their gatekeeper function. District courts have little incentive to perform a time consuming and painstaking analysis with the certain knowledge that they will be second-guessed every step of the way by an appellate court operating on a cold record.

²² See, e.g., *Borawick v. Shay*, 842 F. Supp. 1501, 1501-03, 1507-08 (D. Conn. 1994), *aff'd*, 68 F.3d 597 (2d Cir. 1995); *Sanes*, 57 F.3d at 341.

CONCLUSION

Because the District Court did not abuse its discretion,
the judgment of the Court of Appeals should be reversed.

Respectfully submitted,

Of Counsel:

STEPHEN A. BOKAT
ROBIN S. CONRAD
NATIONAL CHAMBER
LITIGATION CENTER, INC.
1615 H Street, N.W.
Washington, D.C. 20062
(202) 463-5337

THOMAS S. MARTIN *
ROLAND G. SCHROEDER
SHEARMAN & STERLING
801 Pennsylvania Avenue, N.W.
Suite 900
Washington, D.C. 20004
(202) 508-8000
Attorneys for Amicus Curiae

* Counsel of Record